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"Struve's data for the star are:—

Magnitude 3^{m}, $8^{m}\cdot2$ Dist. = 7″·13 Position Angle 197° 39′

whence it follows that the companion star precedes the principal star by 2″·2, and is farther south than it by 6″·8. If we now assume that the place given in the *Nautical Almanac* is exact, it results that the centre of *Saturn* will pass *between* both stars. Galle has found by calculations based on the doctrine of probabilities, that, taking into consideration all the stars down to the ninth magnitude, inclusive, *Saturn* will occult one of such stars only once in every 181 years. If we now assume, in round numbers, the number of these stars to be 200,000 (Humboldt, *Cosmos*, Band iii. s. 146), which will not be far from the truth, and estimate, according to the same authority, the number of stars included between the first and third magnitudes to be 275, it follows, upon the supposition of an uniform distribution of stars in the celestial vault, that *Saturn* occults a star of one of these three classes of magnitude only once in 130,000 years.

"The above number assigned by Galle is, however, liable to some objections. I have not quite at hand the work in which it is deduced, but I rather think that it holds good only for an observer situate on the sun; whence it would follow that if we consider an inhabitant of the earth, the number must be diminished; that is to say, the occultations by *Saturn* must be more abundant. At all events, many thousands of years will elapse before an equally bright star will be again occulted by *Saturn*, and more especially a double star.

"If this matter should appear of sufficient importance to you, I beg of you to have the goodness to communicate it to the Royal Astronomical Society.

"*Berlin, January* 28, 1856."

Places resulting from Observations of Recently Discovered Small Planets made with the Transit Circle, at the Royal Observatory, Greenwich, during the month of December 1855.

Iris.

Greenwich M.S. Time.		R.A.	N.P.D.
	h m s	h m s	° ′ ″
1855, Dec. 6	13 2 14·9	6 3 13·06	67 3 48·45
12	12 32 26·7	5 56 59·33	67 31 26·82
13	12 27 26·2	5 55 54·63	67 36 6·41
18	12 2 20·6	5 50 27·62	67 59 25·31
21	11 47 19·4	5 47 13·62	68 13 17·99

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Parthenope.

Greenwich M.S. Time.		R.A.	N.P.D.
	h m s	h m s	° ′ ″
1855, Dec. 12	9 27 47·6	2 51 49·88	80 21 43·13
15	9 14 40·5	2 50 30·36	80 19 6·55
18	9 1 49·6	2 49 26·99	80 15 16·37
19	8 57 35·1	2 49 8·41	80 13 36·01

Proserpine.

Greenwich M.S. Time.		R.A.	N.P.D.
	h m s	h m s	° ′ ″
1855, Dec. 6	11 30 47·1	4 31 30·31	65 42 57·74
19	10 27 16·5	4 19 4·49	66 0 43·44

Psyche.

Greenwich M.S. Time.		R.A.	N.P.D.
	h m s	h m s	° ′ ″
1855, Dec. 15	10 13 29·8	3 49 29·31	74 42 12·09
18	9 59 49·6	3 47 36·52	74 44 32·37
21	9 46 19·6	3 45 55·98	74 46 8·70

The north polar distances are corrected for refraction, but not for parallax.

In one or two cases the identity of the object observed for the planet is not quite certain.

Observations of the Solar Spots in the Year 1855. By M. Schwabe.

	Number of Groups.	Days of no Spots.	Days of Observation.
January	4	5	21
February	3	1	20
March	6	0	20
April	4	12	29
May	5	15	31
June	2	12	28
July	2	27	30
August	1	24	30
September	1	25	27
October	5	6	30
November	3	9	17
December	2	10	21

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